

EPA General Permit WAG130000 - Annual Report



Annual Report of Operations
for Year 2020

To comply with NPDES General Permit No. WAG130000 for Federal Aquaculture Facilities and Aquaculture Facilities Located in Indian Country within the Boundaries of the State of Washington

NPDES # for your Facility:

WAG-13-0018

Facility & Owner Information

Facility Name:

Lummi Bay Hatchery

Operator Name (Permittee):

Lummi Indian Business Council

Address:

Physical Address:

3801 "B" Haxton Way
Bellingham, WA 98226

Lummi Indian Business Council
2665 Kwina Road
Bellingham, WA 98226

Email:

tomc@lummi-nsn.gov

Phone:

360-312-2320

Owner Name (if different from operator):

Email:

Phone:

Best Management Practices (BMP) Plan

Has the BMP Plan been reviewed this year? ☒ Yes ☐ No

Does the BMP Plan fulfill the requirements of the General Permit? ☒ Yes ☐ No

Summarize any changes to the BMP Plan since the last annual report. Attach additional pages if necessary.

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Operations and Production

Total harvestable weight produced in the past calendar year in pounds (lbs): **26,170**

Pounds of food fed to fish during the maximum month: **7,104**

List the species grown or held at your facility and the annual production of each in gross harvestable weight. If fish were released rather than harvested, list the weight at time of release.

Species	Fish Produced	Receiving Water(s) to which Fish were Released	Month Released/Spawned
Coho Salmon	584,000	Lummi Bay/Southern Georgia Strait	April
Chinook Salmon	507,192	Lummi Bay/Southern Georgia Strait	May

Fill in the table below with production numbers from the past year. List the **maximum** amount of fish on-site and the maximum amount of food fed **per month**.

Month	Total Fish (lbs)	Fish Feed (lbs)	Month	Total Fish (lbs)	Fish Feed (lbs)
January	3,280	827	July		
February	13,606	1,373	August		
March	20,606	4,176	September		
April	26,170	7,104	October		
May	4,192	0	November	262,984	28
June			December	262,902	151

Additional Comments: Fish were released May 1, 2020 and therefore, no feed was administered that month.

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Solid Waste Disposal

Describe the solid waste disposed of during the calendar year (including fish mortalities).

Type of Solid Disposed	Date Disposed	Location Disposed
Juvenile Mortalities	As needed	Garbage
Adult Carcasses	As needed	Crab bait/Garbage
Additional Comments:		

Fish Mortalities

Include a description and the dates of mass mortalities in the past year (more than 5% per week). Attach additional pages, if necessary. Include total mortalities from all causes.

Date	Cause of Deaths	Steps Taken to Correct Problem	Pounds of Fish
3/3 - 3/10	Bacterial gill disease (BGD)	Cease feeding, administer Chloramine-T, increase salinity in tank after BGD controlled.	150
Additional Comments:			

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Noncompliance Summary

Include a description and the dates of noncompliance events (including spills), the reasons for the incidents, and the steps taken to correct the problems. Attach additional pages, if necessary.

Total suspended solids net concentration for December was 5.9mg/L. The average monthly limit exceedence is likely due to work that was done at the reservoir to remove accumulated sediment and increase the water volume capacity. Prior to discharging to receiving waters, all water had been directed to the Lummi Bay Hatchery OSLB to prevent discharge of water that was visibly turbid for approximately 24 hours.

Although the water had visibly cleared after this duration, the TSS analysis suggests a concentration of sediment exceeding the monthly average by 0.9mg/L was still present. The samples were taken immediately before the holiday break, therefore a second sampling event was not possible.

Inspections & Repairs for Production & Wastewater Treatment Systems

Date Inspected	Date Repaired	Description of System Inspected and/or Repaired
Monthly	N/A	Inspection of rearing ponds/raceways and associated plumbing.
Weekly	N/A	Water delivery lines, fish ladder, pumps, filters, and valves

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Aquaculture Drugs and Chemicals

Please indicate whether you used each drug/chemical **during the past calendar year**.

Describe the use of each drug/chemical in more detail on the following pages.

Used in the past year?	Drug or Chemical
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Azithromycin
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Chloramine-T: <i>See additional reporting requirements on page 7</i>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Chlorine
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Draxxin
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Erythromycin - injectable
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Erythromycin - medicated feed
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Florfenicol (Aquaflor)
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Formalin - 37% formaldehyde: <i>See additional reporting requirements on page 7</i>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Herbicide - describe:
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Hormone - describe:
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Hydrogen Peroxide: <i>See additional reporting requirements on page 7</i>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Iodine: <i>See additional reporting requirements on page 7</i>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Oxytetracycline
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Potassium Permanganate: <i>See additional reporting requirements on page 7</i>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Romet
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	SLICE (emamectin benzoate)
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Sodium Chloride - salt
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Vibrio vaccine
<input type="checkbox"/> Yes <input type="checkbox"/> No	Other:
<input type="checkbox"/> Yes <input type="checkbox"/> No	Other:

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Aquaculture Drugs and Chemicals (cont'd)

Describe all drug and/or chemical treatments that occurred during the year. Fill out the information below for each drug or chemical, plus page 7 for water-borne treatments. Attach additional pages as necessary.

Brand Name: N/A		Generic Name: Vibrio vaccine	
Reason for use: Prevention of vibriosis caused by Vibrio anguillarum			
<input checked="" type="checkbox"/> Preventative/Prophylactic <input type="checkbox"/> As-needed	Total quantity of formulated product per treatment (specify units): 1 quart	Total quantity of formulated product used in past year (specify units): 12 gallons	
Date(s) of treatment: March 10 - 26, 2020			Total number of treatments in past year: 48
Maximum daily volume of treated water: Approx. 25 gallons	Treatment concentration (specify units): 1:100 dilution	Duration and frequency of treatment(s): 30 second bath for all fish at marking	
Method of application:			
<input checked="" type="checkbox"/> Static Bath <input type="checkbox"/> Flow-through		<input type="checkbox"/> Medicated Feed <input type="checkbox"/> Other (describe):	
Location in facility chemical was used (check all that apply):			
<input type="checkbox"/> Raceways <input type="checkbox"/> Incubation building		<input type="checkbox"/> Ponds <input type="checkbox"/> Off-line settling basin <input checked="" type="checkbox"/> Other (describe): 30 gallon tub	
Where did water treated with this chemical go? (check all that apply):			
<input type="checkbox"/> Discharged w/o treatment <input checked="" type="checkbox"/> Settling basin		<input type="checkbox"/> Septic System <input type="checkbox"/> Publicly owned treatment works <input type="checkbox"/> Other (describe):	
Provide any additional information about how this chemical was used and/or special pollution prevention practices during use: All treated water disposed to off-line settling basin (OLSB).			

Brand Name:		Generic Name: Chloramine-T	
Reason for use: Treatment for bacterial gill disease			
<input type="checkbox"/> Preventative/Prophylactic <input checked="" type="checkbox"/> As-needed	Total quantity of formulated product per treatment: 910 grams	Total quantity of formulated product used in past year (specify units): 10 kg	
Date(s) of treatment: March 6 - 8, 2020. Two additional treatments March 10			Total number of treatments in past year: 11
Maximum daily volume of treated water: 8,062	Treatment concentration (specify units): 12 ppm	Duration and frequency of treatment(s): 1 hour/pond/day for 3 consecutive days	
Method of application:			
<input type="checkbox"/> Static Bath <input checked="" type="checkbox"/> Flow-through		<input type="checkbox"/> Medicated Feed <input type="checkbox"/> Other (describe):	
Location in facility chemical was used (check all that apply):			
<input type="checkbox"/> Raceways <input type="checkbox"/> Incubation building		<input checked="" type="checkbox"/> Ponds <input type="checkbox"/> Off-line settling basin <input type="checkbox"/> Other (describe):	
Where did water treated with this chemical go? (check all that apply):			
<input type="checkbox"/> Discharged w/o treatment <input checked="" type="checkbox"/> Settling basin		<input type="checkbox"/> Septic System <input type="checkbox"/> Publicly owned treatment works <input type="checkbox"/> Other (describe):	
Provide any additional information about how this chemical was used and/or special pollution prevention practices during use: All treated water diverted to off-line settling basin (OLSB).			

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Aquaculture Drugs and Chemicals (cont'd)

Additional Reporting Requirements for Water-Borne Treatments

- If a water-borne treatment was used during the calendar year, Permittees must include detailed records/calculations as an attachment to this Annual Report in order to demonstrate how the maximum effluent concentrations of solution and active ingredient were calculated for each chemical.
- EPA recognizes that water-borne treatments may vary in the volume of the vessels treated, concentration, quantity of product, etc. Permittees must provide the information listed in the following tables for a reasonable worst case (i.e., maximum effluent concentration) scenario, not for each individual treatment.
- Permittees must submit this information and calculate the maximum effluent concentration for each water-borne chemical used during the past calendar year.
- See also Appendix D for the Chemical Log Sheet.

Static Bath Treatments	
Tank Volume	Liters
Desired Static Bath Treatment Concentration	µg/L
Volume of Product Needed	Liters Product
Maximum Effluent Concentration of: 1) Solution and 2) Active Ingredient	Solution: Active Ingredient: Specify Units
Minimum Volume of Total (treated + untreated) Water Discharged from the Facility per day	Specify Units
Maximum % of Facility Discharge Treated	% of Total Discharge
Flow-Through Treatments	
Tank Volume	53,376 Liters
Calculated Flow Rate	378.5 Liters/Minute
Duration of Treatment	60 Minutes
Desired Flow-Through Treatment Concentration of Product	12,000 µg/L
Amount of Product to Add Initially	0.64 kg Cl-T in 18.93 L H2O Liters Product
Amount of Product to Add During Treatment	316 mL/Minute
Total Volume of Product Needed	0.91 kg in 18.93 L H2O Liters Product
Maximum Effluent Concentration of: 1) Solution and 2) Active Ingredient	Solution: 0 ppb - Sent to OLSB Active Ingredient: 0 ppb - Sent to OLSB Specify Units
Minimum Volume of Total (treated + untreated) Water Discharged from the Facility per day	3,415,000 GPD Specify Units
Maximum % of Facility Discharge Treated	0 % of Total Discharge

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Changes to the Facility or Operations

Describe any changes to the facility or operations since the last annual report.

No reportable changes to facility or operations for 2020.

Signature and Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly evaluate and gather the information submitted. Based on my inquiry of the person or persons, who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

	
Printed name of person signing	Title
Thomas M. Chance	Salmon Enhancement Program Manager
Applicant Signature	Date Signed 1/19/2021

Submittal Information

Send the complete, signed information, along with any attachments, to the following address:

U.S. EPA Region 10, OWW-191

Washington Hatchery Annual Report

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Seattle, WA 98101-3140